



CPA STANDARD FOR POULTRY FEEDS

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[DRAFT CROSQ STANDARD]

- This CROSQ Standard for poultry feed is designed to :
- Ensure that poultry animals, used either as poultry meat or for the production of eggs used for human food, are fed rations, which are appropriate for the category of bird.

DRAFT CROSQ STANDARD (Cont'd)

- Help ensure the safety of food for human consumption through adherence to good poultry feeding practice at the farm level and good manufacturing practices during procurement, handling, storage, processing and distribution of poultry feed and feed ingredients

SCOPE OF STANDARD FOR POULTRY FEED

- This standard establishes specifications for nutrient requirements in the rations fed to poultry animals. It provides guidance on good manufacturing practices for the production of poultry feeds and good on-farm feeding practices.
- It applies to the production and use of all materials designed for poultry feed and feed ingredients at all levels, whether produced industrially or on farm.

[NUTRIENT REQUIREMENTS]

- Table 1 –Nutrient Requirements, Broiler
- Table 2 – Nutrient Requirements, Broiler
- Table 3 – Nutrient Requirements, Pullet
- Table 4- Nutrient Requirements, Pullet
- Table 5-Nutrient Requirements, Turkey
- Table 6- Nutrient Requirements, Turkey
- Table 7- Nutrient requirements, Turkey

GENERAL PRINCIPLES AND REQUIREMENTS

- Feed and Feed Ingredients should be received and Maintained:
 - (a) Free from contamination by pests
 - (b) Chemical, Physical or Microbiological contaminants
 - (c) Other objectionable substances during production, handling, storage and transport.

GENERAL PRINCIPLES AND REQUIREMENTS (Cont'd)

- Where appropriate, the following should be followed :
 - (a) Good Agricultural Practices (GAP)
 - (b) Good Manufacturing Practices (GMPs)
 - (c) Hazard Analysis and Critical Control Points (HACCP) principles

Potential sources of contamination from the environment should be considered
e.g. dust, pathogens, mycotoxins, pesticides etc.

LABELLING REQUIREMENTS

- **Labelling on packaging or on accompanying documents for bulk deliveries should contain the following information :**
- **Country of Origin of Feed;**
- **Information about the species or category of animals for which the feed is intended;**

LABELLING REQUIREMENTS (Cont'd)

- **The purpose for which the feed was intended;**
- **A list of feed ingredients, including appropriate reference to additives, in descending order of production;**
- **Contact information of manufacturer or agent or registrant;**
- **Registration number if applicable;**

LABELLING REQUIREMENTS (Cont'd)

- Directions and precautions for use;
- Lot Identification;
- Manufacturing Date; and
- Best Before or Expiry Date

Feed ingredients consisting, containing or produced from GMOs should be labelled with reference to the genetic modification as a risk management measure.

TRACEABILITY/PRODUCT TRACING AND RECORD KEEPING

- In order to facilitate product tracing of feed and ingredients, including additives, proper labelling and record keeping should be done at all stages of manufacturing and distribution .
- Records and samples should be held for at least 6 months to facilitate traceability if the need arises.

TRACEABILITY/PRODUCT TRACING AND RECORD KEEPING (Cont'd)

- Feed manufacturers should keep records containing full details of suppliers and date of receipt of ingredients, of the manufacturing process and the destination of all feed.
- Records should include :-
 - (a) Inventory records including labels and invoices of received goods
 - (b) Actual formula, mixing sheets

TRACEABILITY/PRODUCTION TRACING AND RECORD KEEPING (Cont'd)

- (c) Daily production logs
- (d) Files of Complaint and files of Manufacturing errors and corrective actions taken
- (e) Analytical results and out of tolerance sample results
- (f) Record of returned and recalled feed

SPECIAL CONDITIONS

APPLICABLE TO EMERGENCY SITUATIONS

- Feed manufacturers should as soon as possible inform the competent authorities in the country in which they manufacture if they consider that a feed or ingredient does not satisfy the safety requirements of this standard.
- If the feed or ingredient is meant for trade internationally, and danger is detected the competent authorities of the exporting country should at least inform the competent authorities of the importing country.

INSPECTION AND CONTROL PROCEDURES

- Feed and feed ingredients manufacturers and other relevant stakeholders in the industry should practice self-regulation/internal-controls to secure compliance with required standards for production, storage and transport
- Risk based official regulatory programmes should be established to check that feed and feed ingredients are produced and distributed in such a way that poultry products for human consumption are safe and suitable.
- Inspection and control procedures should be used to verify that feed and feed ingredients meet the requirements to protect consumers against food borne disease.
- Inspection systems should be designed and operated on the basis of objective risk assessment appropriate to the circumstances.

HEALTH HAZARDS

ASSOCIATED WITH ANIMAL FEEDS

- All feed and feed ingredients should meet minimum safety standards. It is essential that levels of undesirable substances are sufficiently low in feed ingredients that their concentration in food for human consumption is consistently below the level of concern.
- Codex Maximum Residual limits and Extraneous Substances Maximum residue limits set for food, such as those established by the Codex Alimentarius Commission, may be useful in determining the minimum safety standards for feed.

FEED ADDITIVES AND VETERINARY DRUGS USED IN MEDICATED FEED

- Feed additives and veterinary drugs used in medicated feed should be assessed for safety and used under stated conditions of use as pre-scribed by the competent authorities.
- Veterinary drugs used in medicated feed should comply with the provisions of the Codex Recommended International Code of Practice for Control of the use of Veterinary Drugs.
- Feed additives should be received, handled and stored to maintain their integrity and to minimize misuse or contamination. Feed containing them should be used in strict accordance with clearly defined instructions for use.
- Antibiotics should not be used in feed for growth promoting purposes.

FEED AND FEED INGREDIENTS

- Feed and feed ingredients should only be produced, marketed, stored and used if they are safe and suitable, and, when used as intended, should not represent in any way an unacceptable risk to the health of consumer. In particular, feed and feed ingredients contaminated with unacceptable levels of undesirable substances should be clearly identified as unsuitable for animal feed and not marketed or used.
- Feed and feed ingredients should not be presented or marketed in a manner, which may confuse or mislead the user.

UNDESIRABLE SUBSTANCES

- The presence in feed and feed ingredients of undesirable substances such as industrial and environmental contaminants, pesticides, radionuclides, persistent organic pollutants, pathogenic agents and toxins such as mycotoxins should be identified, controlled and minimized. Control measures applied to reduce unacceptable levels of undesirable substances should be validated as to their attaining the desired impact on food safety.
- The risks to health of consumers, associated with the presence in the feed of each undesirable substance, should be assessed, This assessment should form the basis for the setting of maximum limits for feed and feed ingredients or the prohibition of certain materials from poultry feeding.

STORAGE, TRANSPORT AND DISTRIBUTION OF FEED & INGREDIENTS

- The production, processing, storage, transportation and distribution of safe and suitable feed and feed ingredients is the responsibility of all participants in the feed chain, including farmers, feed ingredient manufacturers, feed compounders, truckers etc. Each participant in the feed chain is responsible for all activities, which are under their direct control including compliance with any applicable statutory requirements.
- Feed and feed ingredients should not be produced, processed, stored, transported or distributed in facilities or using equipment where incompatible operations may affect their safety and lead to adverse effects on the health of consumers.

STORAGE, TRANSPORT AND DISTRIBUTION OF FEED & INGREDIENTS (Cont'd)

- Where appropriate, operators should follow GMPs, and, where applicable, HACCP principles to control hazards that may affect food safety. The aim is to ensure feed safety and in particular to prevent contamination of poultry feed and poultry food products as far as this is reasonably achievable, recognizing that total elimination of hazards is often not possible.
- The effective implementation of GMPs and where applicable HACCP-based approaches should ensure, in particular, that the following areas are addressed.

PREMISES

- Buildings and equipment used to process feed and feed ingredients should be constructed in a manner that permits ease of operation, maintenance and cleaning and minimizes feed contamination. Process flow within the manufacturing facility should also be designed to minimize feed contamination.
- Water used in feed manufacture should meet hygienic standards and be of suitable quality for animals. Tanks, pipes and other equipment used to store and convey water should be of appropriate materials, which do not produce unsafe levels of contamination.
- Sewerage, waste and rain water should be disposed of in a manner which avoids contamination of equipment, feed and feed ingredients

RECEIVING, STORAGE AND TRANSPORTATION

- Chemicals, fertilizers, pesticides and other ingredients –stored away to avoid contamination and errors
- Processed feed and ingredients stored separately from unprocessed feed ingredients and packaging – prevent cross contamination
- Undesirable materials in feed and ingredients must be controlled and monitored

RECEIVING, STORAGE AND TRANSPORTATION (Cont'd)

- Feed and feed ingredients must be delivered and used as possible. Feed should be stored and transported in a manner which minimizes deterioration and contamination.
- Avoid deterioration and spoilage at all stages in handling, storage and transport. Avoid fungal and bacterial growth in moist and semi-moist feed.
- Feed and ingredients with undesirable levels of contaminants and unsuitable substances are to be discarded in a safe manner and in accordance to statutory requirements.

[PERSONNEL TRAINING]

- All personnel involved in the manufacture, storage and handling of feed and feed ingredients should be adequately trained and aware of their roles and responsibilities in protecting food safety.

SANITATION AND PEST CONTROL

- Feed and ingredients, processing plants, storage facilities and their immediate surroundings should be kept clean and should have an effective pest control programme.
- Residues of detergents and disinfectants used in cleaning containers and equipment used for processing, transport and storage, conveying, handling and weighing; should be minimized.
- Machinery coming into contact with dry feed should be dried after cleaning before being put to use.
- Precautions should be taken to avoid fungal and bacterial growth when cleaning machinery used for moist and semi-moist feed and ingredients.

EQUIPMENT PERFORMANCE AND MAINTENANCE

- All scales and metering devices used in the manufacturing process should be appropriate for the range of weights and volume measured and should be calibrated periodically.
- Mixers used in the manufacture of feed should be appropriate for the range and volume being mixed and suitable to produce the homogeneous mixtures and dilutions.

MANUFACTURING CONTROLS

- Manufacturing procedures should be used to avoid cross-contamination between batches e.g. flushing, sequencing and physical clean up. Feed and feed ingredients containing restricted or potentially harmful materials such as animal by-product meals or veterinary drugs can cause cross-contamination.
- Where the risk of cross-contamination is high and the use of flushing and cleaning methods is deemed insufficient, consideration should be given to the use of completely different production lines, transfer, storage and delivery equipment.
- Pathogen control procedures, such as heat treatment or the addition of authorized chemicals, should be used where appropriate, and monitored at the applicable steps in the manufacturing process.

ON FARM PRODUCTION AND USE OF FEED

- To help ensure the safety of food used for human consumption, good agricultural practices should be applied, at all stages of on-farm production of cereal grains used as feed or feed ingredients for food producing animals.
- The following 3 types of contamination represent hazards:
 - (a) Biological such as bacteria, fungi and other microbial pathogens;
 - (b) Chemical, such as residues of medication, pesticides, fertilizer etc;
 - (c) Physical such as broken needles, machinery or other foreign materials

AGRICULTURAL PRODUCTION OF FEED

- GAP is encouraged in the production of natural, improved and cultivated cereal grain crops used as feed ingredients for poultry animals.
- Following GAP standards will minimize the risk of biological, chemical and physical contaminants entering the food chain.

METHODS OF SAMPLING AND ANALYSIS

- Sampling protocols set out in ISO or Codex Alimentarius Standards should be followed.
- Analysis- Laboratory methods developed and validated using significantly recognized principles and procedures should be used.
- When selecting methods, consideration should be given to practicability, with preference given to those methods, which are reliable and applicable for routine use.
- Laboratories conducting analyses of feed and feed ingredients should ensure their analytical competency with each method used and maintain appropriate documentation.